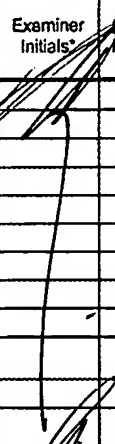


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|   |   | Application Number       | 10/087,153         |                        |                 |
|   |   | Filing Date              | February 28, 2002  |                        |                 |
|   |   | First Named Inventor     | PAVLOVSKAIA, ELENA |                        |                 |
|   |   | Art Unit                 | 3732               |                        |                 |
|   |   | Examiner Name            | MANAHAN, TODD E.   |                        |                 |
| Sheet   | 1 | of                       | 9                  | Attorney Docket Number | 018563-002910US |

| U.S. PATENT DOCUMENTS+ |                          |  |                                |  |   |
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| Examiner<br>Initials*  | Cite<br>No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
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| FOREIGN PATENT DOCUMENTS   |                       |                           |                     |                                   |                             |   |   |                                     |
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| Examiner Initials*   | Cite No. <sup>1</sup> | Foreign Patent Document   |                     |                                   | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T <sup>6</sup>                      |
|  |                       | Country Code <sup>3</sup> | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |                             |   |   |                                     |
|  | 1                     | EP                        | 0091876             | A1                                | 10-19-1983                  | Duret   |   | <input checked="" type="checkbox"/> |
|  | 2                     | EP                        | 0299490             | A2                                | 01-18-1989                  | Steinbichler et al.                             |   | <input checked="" type="checkbox"/> |
|  | 3                     | EP                        | 0376873             | A2                                | 07-04-1990                  | Shafir  |   | <input type="checkbox"/>            |
|  | 4                     | EP                        | 0490848             | A2                                | 06-17-1992                  | Nobelpharma AB.                                 |   | <input type="checkbox"/>            |
|  | 5                     | EP                        | 0541500             | A1                                | 06-12-1998                  | Nobelpharma AB                                  |   | <input type="checkbox"/>            |
|  | 6                     | EP                        | 0731673             | B1                                | 09-18-1998                  | Andersson et al.                                |   | <input type="checkbox"/>            |
|  | 7                     | EP                        | 0774933             | B1                                | 05-28-1997                  | Oden et al.                                     |   | <input type="checkbox"/>            |
|  | 8                     | FR                        | 2652256             | A1                                | 03-29-1991                  | Jourda  |   | <input checked="" type="checkbox"/> |
|  | 9                     | FR                        | 2369828             | A1                                | 06-02-1978                  | Suyehiro  |   | <input checked="" type="checkbox"/> |
|  | 10                    | WO                        | 90/08512            | A1                                | 08-09-1990                  | Dolphin Imaging Systems                         |   | <input type="checkbox"/>            |
|  | 11                    | WO                        | 91/04713            | A1                                | 04-18-1991                  | Jourda et al.                                   |   | <input type="checkbox"/>            |
|  | 12                    | WO                        | 94/10935            | A1                                | 05-26-1994                  | Ormco Corporation                               |   | <input type="checkbox"/>            |
|  | 13                    | WO                        | 98/44865            | A1                                | 10-15-1998                  | Nobel Biocare                                   |   | <input type="checkbox"/>            |
|  | 14                    | WO                        | 98/58596            | A1                                | 12-30-1998                  | Align Technology                                |   | <input type="checkbox"/>            |

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|                                 | 15  | ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," JCO (July 1990), pp. 402-407.  |                |
|                                 | 16  | ALTSCHULER et al., "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," SPIE Imaging Applications for Automated Industrial Inspection and Assembly, vol. 182 (1979), p. 187-191.  |                |
|                                 | 17  | ALTSCHULER et al., "Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Oral-Facial Structures," IADR Abstracts, Program and Abstracts of Papers, 57th General Session, IADR Annual Session, March 29, 1979 - April 1, 1979, New Orleans Marriot, Journal of Dental Research, Vol. 58, January, 1979, Special Issue A, p. 221. |                |
|                                 | 18  | ALTSCHULER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," Optical Engineering, Vol. 20(6) (1981), pp. 953-961.   |                |
|                                 | 19  | ALTSCHULER, "3D Mapping of Maxillo-Facial Prosthesis," AADR Abstract #607, 1980, 1 page total.   |                |
|                                 | 20  | American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.   |                |
|                                 | 21  | ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," Acta Odontologica Scandinavica, vol. 47 (1989), pp. 279-286.  |                |
|                                 | 22  | BAUMRIND et al., "A Stereophotogrammetric System for the Detection of Prosthesis Loosening in Total Hip Arthroplasty," NATO Symposium on Applications of Human Biostereometrics, July 9-13, 1978, SPIE Vol. 166, pp. 112-123.  |                |
|                                 | 23  | BAUMRIND et al., "Mapping the Skull in 3-D, Reprinted from The Journal, California Dental Association, Vol. 48, No. 2 (1972 Fall Issue) 11 pages total.  |                |
|                                 | 24  | BAUMRIND, "A System for Craniofacial Mapping Through the Integration of Data from Stereo X-Ray Films and Stereo Photographs," An invited paper submitted to the 1975 American Society of Photogram. Symposium on Close-Range Photogram. Systems, University of Ill., Aug. 26-30, 1975, pp. 142-166.  |                |
| 25                              | BAUMRIND, "Integrated Three-Dimensional Craniofacial Mapping: Background, Principles, and Perspectives," Seminars in Orthodontics, Vol. 7, No. 4 (Dec. 2001), pp. 223-232.                                |  |                |
| 26                              | BEGOLE et al., "A Computer System for the Analysis of Dental Casts," The Angle Orthodontist, Vol. 51 No. 3 (July 1981), pp. 253-259.  |  |                |
| 27                              | BERNARD et al., "Computerized Diagnosis in Orthodontics for Epidemiological Studies: A Progress Report", Abstracts of Papers, Journal of Dental Research, Vol. 67, Special Issue March 9-13, 1988, p.169. |  |                |
| 28                              | BHATIA et al., "Computer-Aided Design for Orthognathic Surgery," British Journal of Oral and Maxillofacial Surgery, Vol. 22 (1984), pp. 237-253.  |  |                |
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|                                 | 29                       | BIGGERSTAFF et al., "Computerized Analysis of Occlusion In The Postcanine Dentition," <i>American Journal of Orthodontics</i> , Vol. 61, No. 3 (Mar. 1972), pp. 245-254.   |                |
|                                 | 30                       | BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," <i>The Angle Orthodontist</i> , Vol. 40, No. 1 (Jan. 1970), pp. 28-36.  |                |
|                                 | 31                       | BOYD et al., "Three Dimensional Diagnosis and Orthodontic Treatment of Complex Malocclusions With the Invisalign Appliance," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), p. 274-293.  |                |
|                                 | 32                       | BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," <i>Journal of Dental Research</i> , Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, p. 208  |                |
|                                 | 33                       | BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter," <i>J Dent Res.</i> , Vol. 65, No. 3, March 1986, pp. 428-431.   |                |
|                                 | 34                       | BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts 1 and 2)," <i>Journal of Clinical Orthodontics</i> , (Part 1) Vol. 8, No. 7, July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.   |                |
|                                 | 35                       | BURSTONE et al., "Precision Adjustment of the Transpalatal Lingual Arch: Computer Arch Form Predetermination," <i>Am. Journal of Orthodontics</i> , Vol. 79, No. 2 (Feb. 1981), pp. 115-133.   |                |
|                                 | 36                       | CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," <i>JCO</i> (June 1990), pp. 360-367.  |                |
|                                 | 37                       | CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," <i>Clinical Orthopaedics and Related Research</i> , No. 201 (December 1985), pp. 60-67.  |                |
|                                 | 38                       | CHIAPPONE, "Constructing the Gnathologic Setup And Positioner" <i>J. Clin. Orthod.</i> , 14:121-133, 1980.   |                |
|                                 | 39                       | COTTINGHAM, "Gnathologic Clear Plastic Positioner" <i>Am. J. Orthod.</i> , Vol. 55, No. 1, (January 1969), pp. 23-31.  |                |
|                                 | 40                       | CRAWFORD, "Computers in Dentistry: Part 1: CAD/CAM: The Computer Moves Chairside," "Part 2: F. Duret — A Man With A Vision," "Part 3: The Computer Gives New Vision- Literally," "Part 4: Bytes 'N Bites" The Computer Moves From The Front Desk To The Operatory, <i>Canadian Dental Journal</i> , vol. 54(9), , (1988), pp. 661-666. |                |
|                                 | 41                       | CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" <i>Canadian Dental Journal</i> , Vol. 57, No. 2 (Feb. 1991), pp. 121-123.  |                |
|                                 | 42                       | CROOKS, "CAD/CAM Comes to USC," <i>USC Dentistry</i> , (Spring 1990) pp. 14-17.  |                |

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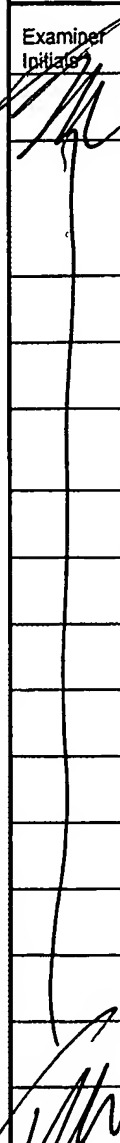
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|  | 43   | CURETON, "Correcting Malaligned Mandibular Incisors With Removable Retainers" <i>J. Clin. Orthod.</i> , 30:390-395, 1996.   |                |
|  | 44   | CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 258-265.                                  |                |
|  | 45   | CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," <i>Plastic and Reconstructive Surgery</i> , Vol. 77, No. 6 (June 1986), pp. 877-885.     |                |
|  | 46   | DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" <i>DSC Production AG</i> , Jan. 1992, pp. 1-7.   |                |
|  | 47   | DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," <i>J. Biomechanics</i> , Vol. 9 (1976), pp. 793-801.  |                |
|  | 48   | Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 2 pages total.   |                |
|  | 49   | DenTrac Corporation, Dentrac document, pp. 4-13.  |                |
|  | 50   | DURET et al., "CAD-CAM in Dentistry," <i>Journal of the American Dental Association</i> , Vol. 117 (Nov. 1988), pp. 715-720.  |                |
|  | 51   | DURET et al., "CAD/CAM Imaging in Dentistry," <i>Current Opinion in Dentistry</i> , Vol. 1 (1991), pp. 150-154.   |                |
|  | 52   | DURET, "Vers une prothese informatisee," (English translation also attached), <i>Tonus</i> , vol. 75, (Nov. 15, 1985), pp. 55-57.   |                |
|  | 53   | DURET, "The Dental CAD/CAM, General Description of the Project," <i>Hennson International Product Brochure</i> , Jan. 1986., 18 pages total.  |                |
|  | 54   | ECONOMIDES, "The Microcomputer in the Orthodontic Office," <i>JCO</i> , (Nov. 1979), pp. 767-772.   |                |
|  | 55   | ELSASSER, "Some Observations on the History and Uses of the Kesling Positioner" <i>Am. J. Orthod.</i> , Vol. 36, No. 5, (May 1950) pp. 368-374.   |                |
|  | 56   | FABER et al., "Computerized interactive orthodontic treatment planning," <i>Am. J. Orthod.</i> , Vol. 73, No. 1 (Jan. 1978), pp. 36-46.   |                |
| 57   | FELTON et al., "A computerized analysis of the shape and stability of mandibular arch form," <i>Am. Journal of Orthodontics and Dentofacial Orthopedics</i> , Vol. 92, No. 6 (Dec. 1987), pp. 478-483. |   |                |
| 58   | FRIEDE et al., "Accuracy of Cephalometric Prediction in Orthognathic Surgery," "Abstract of Papers, <i>Journal of Dental Research</i> , Vol. 70 (1987), pp. 754-760.                                   |   |                |

|                    |   |                 |         |
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|  | 59   | GIM-ALLDENT Deutschland, "Das DUX System: Die Technik" 2 pages total.   |                |
|  | 60   | GRAYSON, "New Methods for Three Dimensional Analysis of Craniofacial Deformity," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery Presented on September 13, 1990, AAOMS 72nd Annual Meeting and Scientific Sessions, Sept. 13, 1990, New Orleans, <i>Journal of Oral and Maxillofacial Surgery</i> , Vol. 48, no. 8, Supp. 1, August 1990, p. 5-6. |                |
|  | 61   | GUESS et al., "Computer Treatment Estimates in Orthodontics and Orthognathic Surgery," <i>JCO</i> , (April, 1989), pp. 262-28.  |                |
|  | 62   | HEAVEN et al., "Computer-based Image Analysis of Artificial Root Surface Caries," Abstracts of Papers, <i>Journal of Dental Research</i> , Vol. 70, April 17-21, 1991, p. 528.  |                |
|  | 63   | HOFFMANN et al., "Role of Cephalometry for Planning of Jaw Orthopedics and Jaw Surgery Procedures," (Article Summary In English, article in German), <i>Informationen</i> , (March 1991), pp. 375-396.  |                |
|  | 64   | HUCKINS, "CAD-CAM Generated Mandibular Model Prototype from MRI Data," <i>AAOMS</i> 1999, p. 96.  |                |
|  | 65   | JCO Interviews, "Craig Andreiko, DDS, MS on the Elan and Orthos Systems", <i>JCO</i> , (Aug. 1994), pp. 459-468.  |                |
|  | 66   | JCO Interviews, "Dr. Homer W. Phillips on Computers in Orthodontic Practice, Part 2," <i>JCO</i> , (Dec. 1983), pp. 819-831.  |                |
|  | 67   | JERROLD, "The Problem, Electronic Data Transmission and the Law," <i>AJO-DO</i> , (Apr. 1988), pp. 478-479.   |                |
|  | 68   | JONES et al., "An Assessment of the Fit of a Parabolic Curve to Pre- and Post-Treatment Dental Arches," <i>British Journal of Orthodontics</i> , Vol. 16 (1989), pp. 85-93.   |                |
|  | 69   | KAMADA et al., "Case Reports on Tooth Positioners Using LTV Vinyl Silicone Rubber" <i>J. Nihon University School of Dentistry</i> , 26(1):11-29, 1984.  |                |
|  | 70   | KAMADA et al., "Construction of Tooth Positioners With LTV Vinyl Silicone Rubber and Some Case Reports" <i>J. Nihon University School of Dentistry</i> , 24(1):1-27, 1982.  |                |
|  | 71   | KANAZAWA et al., "Three-Dimensional Measurements of the Occlusal Surfaces of Upper Molars in a Dutch Population," <i>J. Dent Res.</i> , Vol. 63, No. 11 (Nov. 1984), pp. 1298-1301.   |                |
| 72   | KESLING, "Coordinating the Predetermined Pattern and Tooth Positioner With Conventional Treatment" <i>Am. J. Orthod. Oral. Surg.</i> , 32:285-293, 1946. |   |                |
| 73   | KESLING, "The Philosophy of the Tooth Positioning Appliance" <i>Am. J. Orthod. Oral. Surg.</i> , 31(6):297-304, 1945.                                    |   |                |

|                    |   |                 |         |
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|                                 | 74                    | KLEEMANN et al., "The Speed Positioner" <i>J. Clin. Orthod.</i> , 30:673-680, 1996.   |                |
|                                 | 75                    | KURODA et al., "Three-dimensional dental cast analyzing system using laser scanning" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 110:365-369, 1996.   |                |
|                                 | 76                    | LAURENDEAU et al., "A Computer-Vision Technique for the Acquisition and Processing of 3-D Profiles of Dental Imprints: An Application in Orthodontics," <i>IEEE Transactions on Medical Imaging</i> , Vol. 10, No. 3 (Sept. 1991), pp. 453-461.                 |                |
|                                 | 77                    | LEINFELDER et al., "A new method for generating ceramic restorations: a CAD-CAM system," <i>Journal Of The American Dental Assoc.</i> , Vol. 118, No. 6 (Jun. 1989), pp. 703-707.   |                |
|                                 | 78                    | MANETTI et al., "Computer-aided Cefalometry and New Mechanics in Orthodontics" (Article Summary in English, article in German), <i>Fortschr. Kieferorthop.</i> 44, 370-376 (Nr. 5), 1983  |                |
|                                 | 79                    | MCCANN, "Dental Technology", Inside the ADA, <i>JADA.</i> , Vol. 118 (March 1989) pp. 286-294.  |                |
|                                 | 80                    | MCNAMARA et al., "Invisible Retainers", <i>J. Clinical Orthodontics</i> , (August 1985) pp. 570-578.  |                |
|                                 | 81                    | MCNAMARA et al., Chapter 19: Invisible Retainers, <i>Orthodontic and Orthopedic Treatment in the Mixed Dentition</i> , Needham Press, January 1993. pp.347-353.   |                |
|                                 | 82                    | MOERMANN et al., "Computer Machined Adhesive Porcelain Inlays: Margin Adaptation after Fatigue Stress," IADR Abstract 339, <i>Journal of Dental Research</i> , vol. 66(a) (1987), p. 763.   |                |
|                                 | 83                    | MÖRMANN et al., "Marginal Adaptation von adhasiven Porzellaninlays in vitro," <i>Schwizerische Monatsschrift für Zahnmedizin</i> , Vol. 85 (1985), p. 1118-1129.  |                |
|                                 | 84                    | NAHOUM, "The Vacuum Formed Dental Contour Appliance" <i>The New York State Dental Journal</i> , 30(9):385-390, Nov. 1964.   |                |
|                                 | 85                    | NASH, "CEREC CAD/CAM Inlays: Aesthetics and Durability in a Single Appointment," <i>Dentistry Today</i> , (October 1990), pp. 20, 22-23, 54.  |                |
|                                 | 86                    | NISHIYAMA et al., "A New Construction Of Tooth Repositioner By LTV Vinyl Silicone Rubber" <i>J. Nihon University School of Dentistry</i> , 19(2):93-102, 1977.  |                |
|                                 | 87                    | PINKHAM, "'Foolish' Concept Propels Technology," <i>Dentist</i> , Jan./Feb. 1989, 3 pages total.  |                |
|                                 | 88                    | PINKHAM, "Inventor's CAD/CAM may transform dentistry," <i>Dentist</i> , Sept. 1990, 3 pages total.  |                |
|                                 | 89                    | PONITZ, "Invisible Retainers", <i>Am. J. Orthodontics</i> , Vol. 59, No. 3, March 1971, pp. 266-272.  |                |

|                    |                 |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
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|   |   | Filing Date              | February 28, 2002  |                        |                 |
|   |   | First Named Inventor     | PAVLOVSKAIA, ELENA |                        |                 |
|   |   | Art Unit                 | 3732               |                        |                 |
|   |   | Examiner Name            | MANAHAN, TODD E.   |                        |                 |
| Sheet   | 7 | of                       | 9                  | Attorney Docket Number | 018563-002910US |

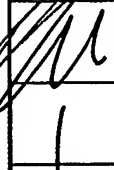

| NON PATENT LITERATURE DOCUMENTS |                       |  |                |
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| Examiner Initials               | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.  | T <sup>2</sup> |
|                                 | 90                    | Procera Research Projects, <i>PROCERA Research Projects 1993 — Abstract Collection</i> , 1993, pp. 3-24.   |                |
|                                 | 91                    | REKOW, "A Review of the Developments in Dental CAD/CAM Systems," (contains references to Japanese efforts and content of the papers of particular interest to the clinician are indicated with a one-line summary of their content in the bibliography), <i>Dental Clinics: Prosthodontics and Endodontics</i> , pp.25-33, 1992. |                |
|                                 | 92                    | REKOW, "CAD/CAM in Dentistry: A Historical Perspective and View of the Future," <i>Journal</i> , Vol. 58 No. 4, (April 1992), pp. 283, 287-288.  |                |
|                                 | 93                    | REKOW, "Computer-Aided Design and Manufacturing in Dentistry: A Review of the State of the Art," <i>The Journal of Prosthetic Dentistry</i> , Vol. 58, No. 4 (Oct. 1987), pp. 512-516.   |                |
|                                 | 94                    | REKOW, "Dental CAD-CAM Systems: What is the State of the Art?" <i>Journal of the American Dental Assoc.</i> , Vol. 122 (1991), pp. 43-48.  |                |
|                                 | 95                    | REKOW, "Feasibility of an Automated System for Production of "Dental Restorations," PhD Thesis, Univ. of Minnesota, Nov. 1988, 244 pages total.  |                |
|                                 | 96                    | RICHMOND et al., Research Reports, "The Development of a 3D Cast Analysis System," <i>British Journal of Orthodontics</i> , Vol. 13, No. 1, (January 1986) pp. 53-54.  |                |
|                                 | 97                    | RICHMOND, "Recording The Dental Cast In Three Dimensions," <i>Am. J. Orthod. Dentofac. Orthop.</i> , Vol. 92, No. 3, (Sept. 1987), pp.199-206.   |                |
|                                 | 98                    | RUDGE, "Dental arch analysis: arch form, A review of the literature," <i>European Journal of Orthodontics</i> , Vol. 3, No. 4 (1981), pp.279-284.  |                |
|                                 | 99                    | SAKUDA et al., "Integrated information-processing system in clinical orthodontics: An approach with use of a computer network system," <i>Am. J. Orthod. Dentofac. Orthop.</i> Vol. 101 No. 3 (March 1992), pp. 210-220.   |                |
|                                 | 100                   | SCHELLHAS et al., "Three-Dimensional Computed Tomography in Maxillofacial Surgical Planning," <i>Arch Otolaryngol Head Neck Surg.</i> Vol. 114 (April 1988), pp. 438-442.  |                |
|                                 | 101                   | SHILLIDAY, "Minimizing finishing problems with the mini-positioner" <i>Am. J. Orthod.</i> 59:596-599, 1971   |                |
|                                 | 102                   | Siemens, "CEREC - Computer-Reconstruction, "High Tech in der Zahnmedizin, 14 page total.   |                |
|                                 | 103                   | Sirona Dental Systems GmbH, CEREC 3D, Manuel utilisateur, Version 2.0X (in French), 2003, 114 pages total.   |                |
|                                 | 104                   | STOLL et al., "Computer-aided Technologies in Dentistry" (Article Summary in English, article in German), <i>Dtsch Zahnärztl Z</i> 45, 314-322, 1990.  |                |

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|  |   | Application Number       | 10/087,153         |                        |                 |
|  |   | Filing Date              | February 28, 2002  |                        |                 |
|  |   | First Named Inventor     | PAVLOVSKAIA, ELENA |                        |                 |
|  |   | Art Unit                 | 3732               |                        |                 |
|  |   | Examiner Name            | MANAHAN, TODD E.   |                        |                 |
| Sheet  | 8 | of                       | 9                  | Attorney Docket Number | 018563-002910US |

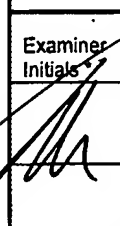
| NON PATENT LITERATURE DOCUMENTS   |                          |  |                |
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|    | 105                      | U.S. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Melville NY, October 1977, 20 pages total.   |                |
|   | 106                      | U.S. Department of Commerce, National Technical Information Service, "Holodontography: An Introduction to Dental Laser Holography," School of Aerospace Medicine Brooks AFB Tex, March 1973, 37 pages total.   |                |
|   | 107                      | U.S. Provisional Patent Application No. 60/050342, filed on June 20, 1997, 41 pages total.   |                |
|   | 108                      | VAN DER LINDEN et al., "Three-Dimensional Analysis of Dental Casts by Means of the Optocom," <i>J Dent Res</i> , July-August 1972, Vol. 51, No. 4, p. 1100.  |                |
|   | 109                      | VAN DER LINDEN, "A New Method to Determine Tooth Positions and Dental Arch Dimensions," July-August 1972, p. 1104.   |                |
|   | 110                      | VAN DER ZEL, "Ceramic-fused-to-metal Restorations with a New CAD/CAM System," <i>Quintessence International</i> , vol. 24(11) (1993), pp. 769-778.   |                |
|   | 111                      | VARADY et al., "Reverse engineering of geometric models---an introduction. Computer-Aided Design, 29 (4):255-268, 1997.  |                |
|   | 112                      | WARUNEK et al., "Clinical use of silicone elastomer appliances" <i>JCO</i> , MH (10):694-700, 1989.  |                |
|   | 113                      | WARUNEK et al., "Physical And Mechanical Properties of Elastomers In Orthodontic Positioners" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 95:388-400, 1989.  |                |
|   | 114                      | WELLS, "Application of the Positioner Appliance in Orthodontic Treatment" <i>Am. J. Orthodont.</i> , 58:351-366, 1970.   |                |
|   | 115                      | WILLIAMS, "Dentistry and CAD/CAM: Another French Revolution," <i>Journal of Dental Practice Admin.</i> , Jan./March 1987, pp. 2-5.   |                |
|   | 116                      | WILLIAMS, "The Switzerland and Minnesota Developments in CAD/CAM," <i>Journal of Dental Practice Admin.</i> , pp. 50-55, April/June 1987.  |                |
|   | 117                      | WISHAN, "New Advances in Personal Computer Applications for Cephalometric Analysis, Growth Prediction, Surgical Treatment Planning and Imaging Processing," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery Presented on September 13, 1990, AAOMS 72nd Annual Meeting and Scientific Sessions, Sept. 13, 1990, New Orleans, <i>Journal of Oral and Maxillofacial Surgery</i> , Vol. 48, no. 8, Supp. 1, August 1990, p. 5. |                |
|  | 118                      | YAMAMOTO et al., "Three-Dimensional Measurement of Dental Cast Profiles and Its Applications to Orthodontics," Annual Int'l Conf. of IEEE Engineering in Medicine and Biology Society, Vol. 12, No. 5, pp. 2051-2053, 1990   |                |

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|  | 119                      | YAMAMOTO et al., "Optical Measurement of Dental Cast Profile and Application to Analysis Of Three-Dimensional Tooth Movement in Orthodontics," <i>Frontiers in Med. and Biol. Eng'g</i> , Vol. 1, No. 2 (1988), pp. 119-130.                                    |                |
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